

CD19 (B-Lymphocyte Marker) Antibody - With BSA and Azide Mouse Monoclonal Antibody [Clone CVID3/429 ] Catalog # AH12655

### Specification

## CD19 (B-Lymphocyte Marker) Antibody - With BSA and Azide - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

,3,4, <u>P15391</u> <u>930, 652262</u> Human, Monkey, Chimpanzee Mouse Monoclonal Mouse / IgG1, kappa 95kDa KDa

## CD19 (B-Lymphocyte Marker) Antibody - With BSA and Azide - Additional Information

Gene ID 930

**Other Names** B-lymphocyte antigen CD19, B-lymphocyte surface antigen B4, Differentiation antigen CD19, T-cell surface antigen Leu-12, CD19, CD19

Storage Store at 2 to 8°C.Antibody is stable for 24 months.

Precautions

CD19 (B-Lymphocyte Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

## CD19 (B-Lymphocyte Marker) Antibody - With BSA and Azide - Protein Information

Name CD19

#### Function

Functions as a coreceptor for the B-cell antigen receptor complex (BCR) on B-lymphocytes (PubMed:<a href="http://www.uniprot.org/citations/29523808" target="\_blank">29523808</a>). Decreases the threshold for activation of downstream signaling pathways and for triggering B-cell responses to antigens (PubMed:<a href="http://www.uniprot.org/citations/1373518" target="\_blank">1373518</a>, PubMed:<a href="http://www.uniprot.org/citations/16672701" target="\_blank">16672701</a>, PubMed:<a href="http://www.uniprot.org/citations/16672701" target="\_blank">2463100</a>). Activates signaling pathways that lead to the activation of phosphatidylinositol 3-kinase and the mobilization of intracellular Ca(2+) stores (PubMed:<a href="http://www.uniprot.org/citations/12387743" target="\_blank">12387743</a>, PubMed:<a href="http://www.uniprot.org/citations/16672701</a>, PubMed:<a href="http://www.uniprot.org/citations/2463100" target="\_blank">2463100</a>). Activates signaling pathways that lead to the activation of phosphatidylinositol 3-kinase and the mobilization of intracellular Ca(2+) stores (PubMed:<a href="http://www.uniprot.org/citations/12387743" target="\_blank">12387743</a>, PubMed:<a href="http://www.uniprot.org/citations/16672701" target="\_blank">9317126</a>, PubMed:<a href="http://www.uniprot.org/citations/12387743" target="\_blank">9317126</a>, PubMed:<a href="http://www.uniprot.org/citations/12387743" target="\_blank">9317126</a>, PubMed:<a href="http://www.uniprot.org/citations/9317126" target="\_blank">9317126</a>, PubMed:<a href="http://www.uniprot.org/citations/9317126" target="\_blank">9317126</a>, PubMed:<a href="http://www.uniprot.org/citations/9382888" target="\_blank">9382888</a>). Is not required for early steps during B cell differentiation in the blood marrow (PubMed:<a



href="http://www.uniprot.org/citations/9317126" target="\_blank">9317126</a>). Required for normal differentiation of B-1 cells (By similarity). Required for normal B cell differentiation and proliferation in response to antigen challenges (PubMed:<a

href="http://www.uniprot.org/citations/1373518" target="\_blank">1373518</a>, PubMed:<a href="http://www.uniprot.org/citations/2463100" target="\_blank">2463100</a>). Required for normal levels of serum immunoglobulins, and for production of high-affinity antibodies in response to antigen challenge (PubMed:<a href="http://www.uniprot.org/citations/12387743" target="\_blank">12387743</a>, PubMed:<a href="http://www.uniprot.org/citations/16672701" target="\_blank">16672701</a>, PubMed:<a href="http://www.uniprot.org/citations/16672701" target="\_blank">9317126" target="\_blank">9317126" target="\_blank">9317126</a>).

**Cellular Location** 

Cell membrane; Single-pass type I membrane protein. Membrane raft {ECO:0000250|UniProtKB:P25918}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P25918}

Tissue Location

Detected on marginal zone and germinal center B cells in lymph nodes (PubMed:2463100). Detected on blood B cells (at protein level) (PubMed:16672701, PubMed:2463100)

## CD19 (B-Lymphocyte Marker) Antibody - With BSA and Azide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## CD19 (B-Lymphocyte Marker) Antibody - With BSA and Azide - Images

# CD19 (B-Lymphocyte Marker) Antibody - With BSA and Azide - Background

CD19 is a transmembrane glycoprotein that contains two extracellular immunoglobulin-like domains. CD19 is present in both benign and malignant B-cells and is considered to be the most reliable surface marker of this lineage over a wide range of maturational stages. In normal lymphoid tissue, CD19 is observed in germinal centers, in mantle zone cells, and in scattered cells of the inter-follicular areas. Anti-CD19 exhibits an overall immunoreactivity pattern similar to those of the antibodies against CD20 and CD22. However, in contrast to CD20, expression of CD19 is continuous throughout B-cell development and through terminal differentiation of B-cells into plasma cells. Anti-CD19 positivity is seen in the vast majority of B-cell neoplasms commonly at a lower intensity than normal B-cell counterparts. Plasma cell neoplasms are nearly always negative, as are T-cell neoplasms.

# CD19 (B-Lymphocyte Marker) Antibody - With BSA and Azide - References

Bregni, M. Siena, S., Formosa, A., Lappi, D.A., Martineau, D., Malavasi, F., Dorken, B., Bonadonna, G. and Gianni, A.M. 1989. B cell restricted saporin immunotoxins: activity against B cell lines and chronic lymphocytic leukemia cells. Blood 73: 753-76